



## **DoD Global Influenza and Other Respiratory Viral Pathogens Week 15 (10 Apr – 16 Apr) Weekly Surveillance Report**



### **NEW ISOLATES COLLECTED IN WEEK 15: 1 Influenza A, 0 Influenza B**

In addition, 10 influenza A and 16 influenza B isolates were newly identified during Week 15, but were collected prior to that week. For results from individual bases, click [here](#).

### **SUMMARY:**

#### **Overall Results**

Since 3 October 2004, the Epidemiological Surveillance Division (AFIOH/SDE) has processed 2722 specimens as part of the influenza surveillance program. Of those specimens, 733 (27%) were positive for influenza A, and 169 (6%) were positive for influenza B. In addition, 37 specimens are still being processed. Click [here](#) for a graph of influenza positives (number and percentage) by week.

For a table of specimens submitted by individual sentinel sites, click [here](#).

Besides influenza A and B, the AFIOH lab also tests specimens for adenovirus, HSV, RSV, enterovirus, and parainfluenza pathogens. In the current week's samples, only influenza A and B were found. For viral results by week, click [here](#). Viral results are also broken down by [MAJCOM](#); counts include specimens collected prior to the current week.

#### **Subtyping**

Since 3 October 2004, we have [subtyped](#) 566 isolates using either polymerase chain reaction (PCR) or hemagglutination-inhibition (HI): 469 are Influenza A/H3N2, 16 are Influenza B/Hong Kong, and 81 are Influenza B/Shanghai.

#### **Age/Military Status**

Overall, Influenza A seems to be dominating all [age](#) and [military status](#) categories in this flu season.

#### **Influenza-like Illness (ILI) Rates**

According to ESSENCE, [ILI rates](#) this week continue to decrease for the overall Global Military Health System.

#### **Locations**

- Click the following links for cumulative influenza results by sentinel site: [CONUS](#), [OCONUS](#)
- Results for individual bases and CDC regions can be found on the AFIOH Influenza Surveillance website: <https://gumbo.brooks.af.mil/pestilence/Influenza/>

**COMMENTS ON CURRENT TRENDS:** Influenza activity continues to decrease among DoD sites, and the CDC is reporting a continued decrease in activity as well. European countries and Japan report similar decreasing trends.

ILI rates for the whole Pacific Rim region (taken from ESSENCE) are now approaching those of other DoD sites; Osan AB ILI rates decreased in the past week. FYI: ILI rates for most bases have not returned to baseline; however, the baseline was skewed downward from the early peak of the 2003-04 season.

## **NATIONAL INFLUENZA ACTIVITY: CDC**

<http://www.cdc.gov/ncidod/diseases/flu/weeklychoice.htm>

During week 14 (the latest report available), CDC reported continued decreasing influenza activity; the flu epidemic this year seems to have peaked in early February. Laboratory surveillance identified 239 specimens (11.2%) positive for influenza. Of these, 9 were influenza A (H3N2), 63 were influenza A viruses that were not subtyped, and 85 were influenza B. Two states reported widespread influenza activity; 3 states reported regional activity; 14 states reported local activity; and 29 states, the District of Columbia, New York City, and Puerto Rico reported sporadic activity. Arkansas reported no activity.

## **INTERNATIONAL INFLUENZA ACTIVITY: WHO**

<http://www.who.int/GlobalAtlas/DataQuery/home.asp>

Week in review: **Weeks 14-15**

*South America:* Argentina and Chile reported sporadic activity.

*Asia:* China, Israel, and Thailand reported sporadic activity.

*Europe:* France, Italy, and Switzerland reported sporadic activity. Romania and Ukraine reported local outbreaks. Latvia, the Russian Federation, and Sweden reported regional outbreaks.

*North America:* The United States reported sporadic activity.

*Africa:* No activity reported.

**Note:** WHO review has been expanded to the previous 2 weeks in order to capture delayed reports from countries.

## **ADDITIONAL INFORMATION:**

### **Influenza A/H2N2 Strain found in U.S. Laboratories:**

The CDC learned on 8 April that influenza test kits distributed by several U.S. providers contained an influenza strain (A/H2N2) similar to the 1957 pandemic strain. Kits were sent to laboratories in the U.S. and 17 other countries for quality control purposes. Today's population has little or no immunity to this strain, as it has not been included in the flu vaccine since the 1960s. Though risk is minimal, concerns have been raised regarding a possible pandemic. No recent H2N2 infections have been reported to date. CDC, HHS, and WHO have recommended that laboratories destroy the H2N2 samples immediately. The AFIOH laboratory has retrieved all H2N2 samples it had received and has destroyed them.

For more information please see:

<http://www.phppo.cdc.gov/HAN/ArchiveSys/ViewMsgV.asp?AlertNum=00227>

### **Avian Influenza Update\*:**

The Ministry of Health in Viet Nam has confirmed an additional eight cases of influenza H5N1. Two of these are recent cases (between 2 and 8 April), both of whom are alive. The other six cases occurred prior to 2 April; outcome information is currently being sought by WHO. A total of 41 cases have been confirmed in Viet Nam since mid-December 2004; 16 have died and 6 remain under treatment.

\*As reported by WHO on 14 April 2005. For a full report, please see:

[http://www.who.int/csr/don/2005\\_04\\_14/en/](http://www.who.int/csr/don/2005_04_14/en/)

**Influenza-Associated Pediatric Deaths:** During week 14, one pediatric death was reported to the CDC. During the current season, the CDC has reported 28 pediatric deaths related to influenza infection from 13 states: California, Colorado, Florida, Georgia, Iowa, Maine, Massachusetts, Mississippi, New Jersey, New York, Ohio, Pennsylvania, and Vermont.

Please direct any questions or comments to: [influenza@brooks.af.mil](mailto:influenza@brooks.af.mil)

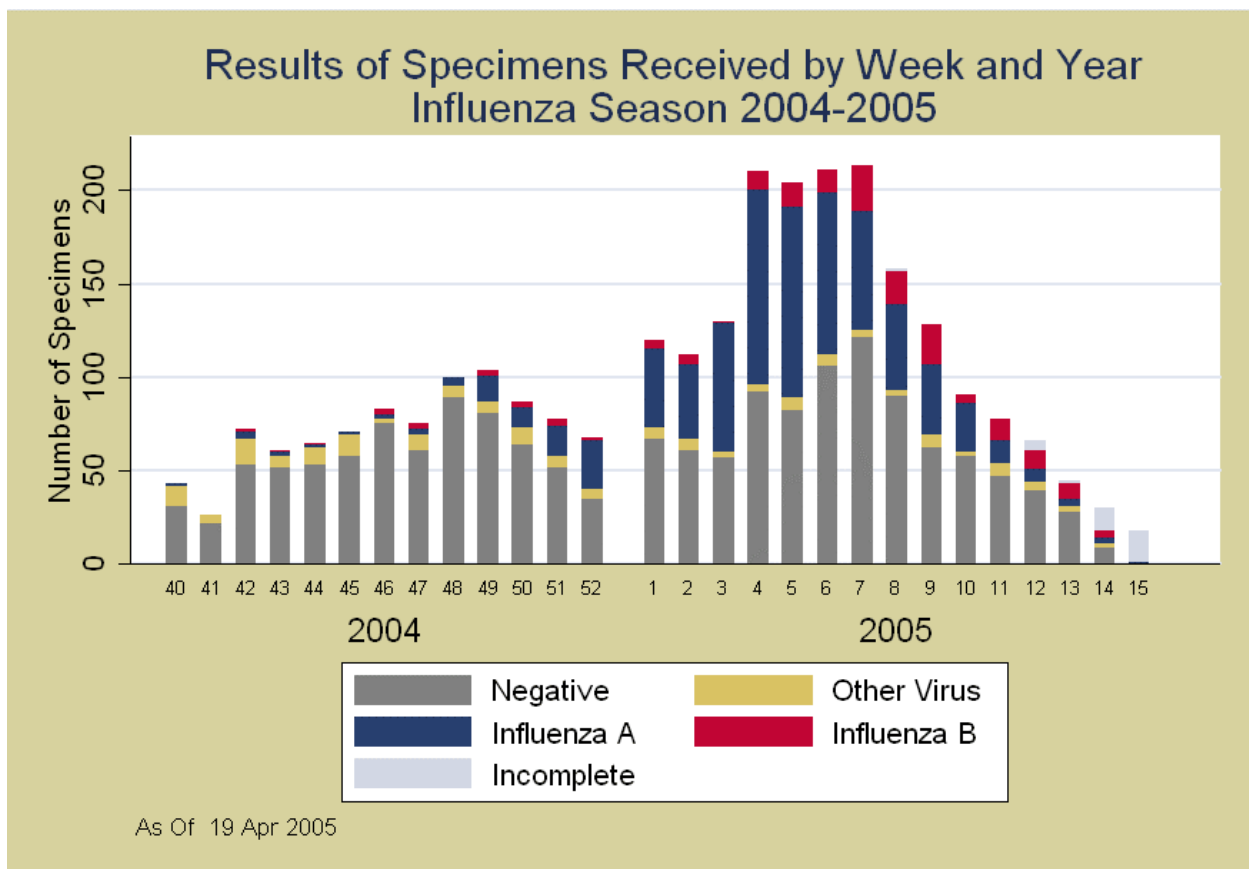
**Table 1: Newly Identified Influenza Specimens this Week, by Base**

Site Name	Influenza A		Influenza B	
	New*	Old**	New*	Old**
Bethesda USNH, MD				1
Lackland AFB, TX				1
McGuire AFB, NJ	1			
Scott AFB, IL				1
Tripler AMC, HI***		10		13

\*New: newly identified and collected during current week

\*\*Old: newly identified, but collected prior to current week

\*\*\* Specimens were collected over a period of several weeks and processed all at once

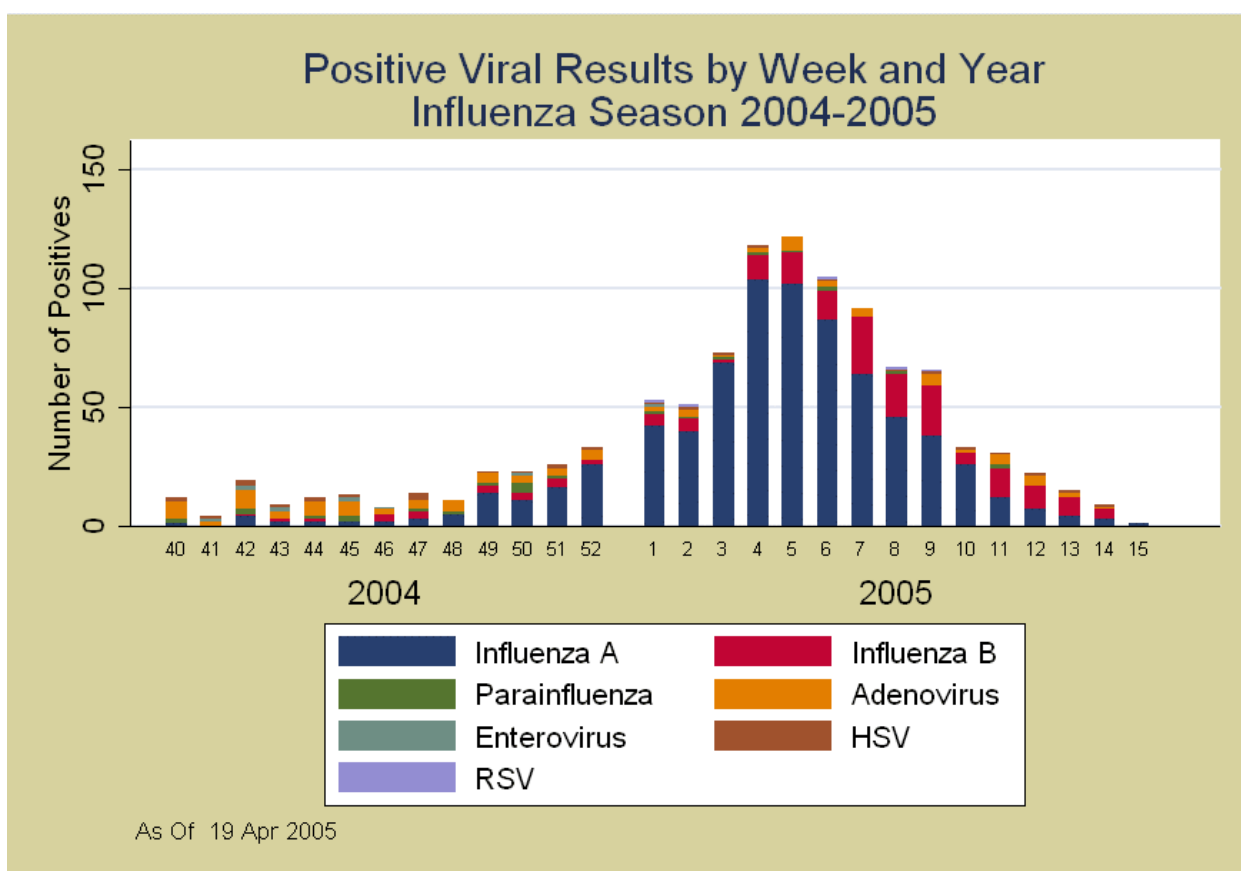


**Tables 2 and 3: Respiratory Specimens Submitted by Sentinel Sites, and by Overseas Laboratories since October 3, 2004 (including Incomplete Processing)**

<b>AETC</b>	<b>Specimens Submitted</b>
Maxwell AFB, AL	<b>65</b>
Sheppard AFB, TX	<b>226</b>
<b>AMC</b>	<b>Specimens Submitted</b>
Andrews AFB, MD	<b>10</b>
Travis AFB, CA	<b>27</b>
McGuire AFB, NJ	<b>118</b>
Scott AFB, IL	<b>397</b>
<b>CENTCOM</b>	<b>Specimens Submitted</b>
Ganci AB, Kyrg	<b>0</b>
Al Udeid AB, Qatar	<b>12</b>
Balad AB, Iraq	<b>25</b>
<b>PACAF</b>	<b>Specimens Submitted</b>
Hickam AFB/NS Pearl Harbor, HI	<b>0</b>
Kadena AB, Japan	<b>1</b>
Kunsan AB, Korea	<b>9</b>
Andersen AFB, Guam	<b>13</b>
Yokota AB, Japan	<b>64</b>
Misawa AB, Japan	<b>52</b>
Osan AB, Korea	<b>30</b>
Elmendorf AFB, AK	<b>49</b>
<b>USAFA</b>	<b>Specimens Submitted</b>
US Air Force Academy, CO	<b>61</b>

<b>USAFE</b>	<b>Specimens Submitted</b>
Incirlik AB, Turkey	<b>21</b>
Aviano AB, Italy	<b>42</b>
Ramstein AB, Germany	<b>73</b>
RAF Lakenheath, UK	<b>276</b>
<b>ARMY</b>	<b>Specimens Submitted</b>
Landstuhl RMC, Germany	<b>47</b>
Tripler AMC, HI	<b>68</b>
<b>COAST GUARD</b>	<b>Specimens Submitted</b>
CGS Ketchikan, AK	<b>0</b>
<b>NAVY</b>	<b>Specimens Submitted</b>
NMC San Diego, CA	<b>5</b>
NH Yokosuka, Japan	<b>31</b>
Bremerton NS, WA	<b>13</b>
NAB Little Creek, VA	<b>77</b>
<b><i>TOTAL for SENTINEL SITES</i></b>	<b><i>1812</i></b>

<b>OVERSEAS LAB</b>	<b>Specimens Submitted</b>
AFRIMS, Thailand	<b>0</b>
AFRIMS, Nepal	<b>0</b>
Nicaragua	<b>0</b>
NMRC-D, Peru	<b>363</b>
<b><i>TOTAL for OVERSEAS LABS</i></b>	<b><i>363</i></b>



**Note:** Graphs do not include data from the NHRC, which conducts Febrile Respiratory Illness (FRI) surveillance among recruit populations. NHRC compiles this data into a separate report. For more information, visit the NHRC website at <http://www.nhrc.navy.mil/geis/>

**Table 4. Summary of Recently Processed Specimens from All Sites**

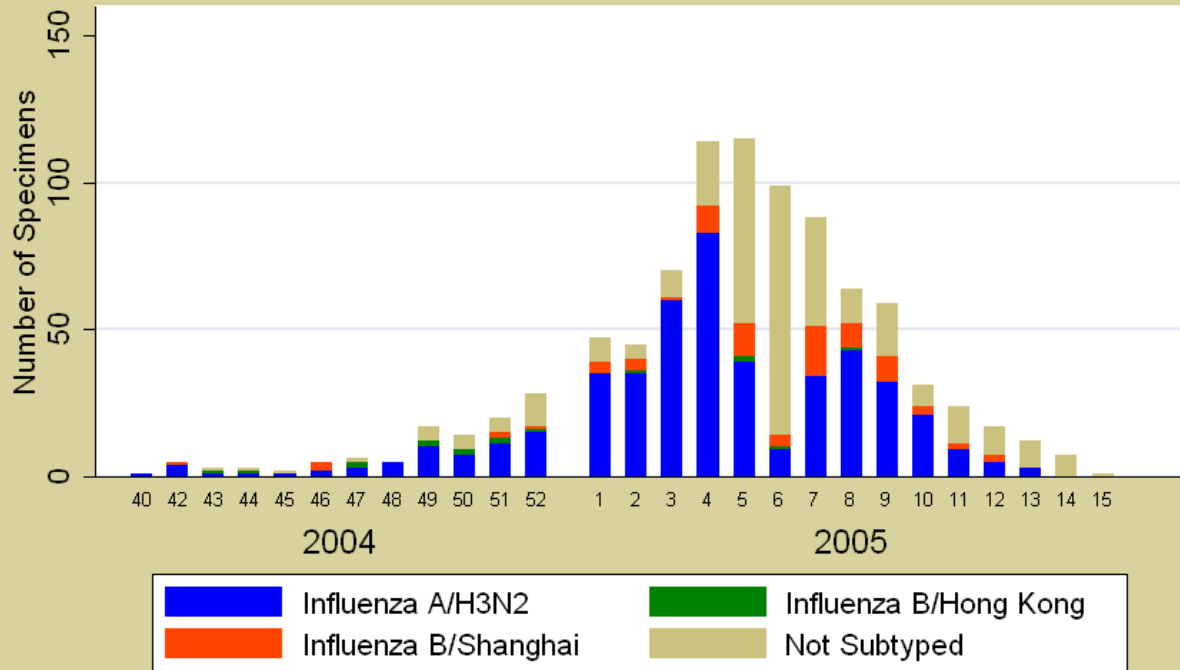
This table includes specimens collected prior to the current week, so results may not match the above graph.

Location	Results of Specimens Processed during current week*				
	Negative	Influenza A	Influenza B	Adenovirus	Other
<b>TOTAL</b>	<b>45</b>	<b>13</b>	<b>16</b>	<b>2</b>	<b>1**</b>
<b>NORTH AMERICA</b>	31	2	3	2	1
<b>PACOM</b>	9	10	13	0	0
<b>EUCOM</b>	5	1	0	0	0
<b>CENTCOM</b>	0	0	0	0	0
<b>SOUTH AMERICA</b>	0	0	0	0	0

Comments: \* Influenza A and B totals include recent subtyping results.

\*\*1 HSV

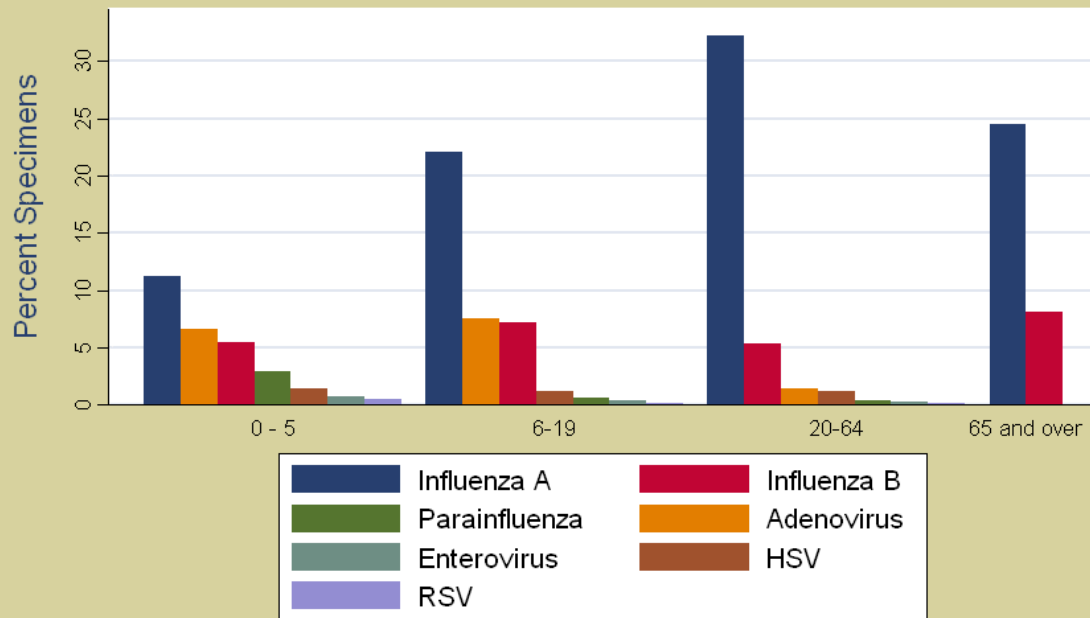
## Subtyping Results by Week and Year Influenza Season 2004-2005



As Of 19 Apr 2005

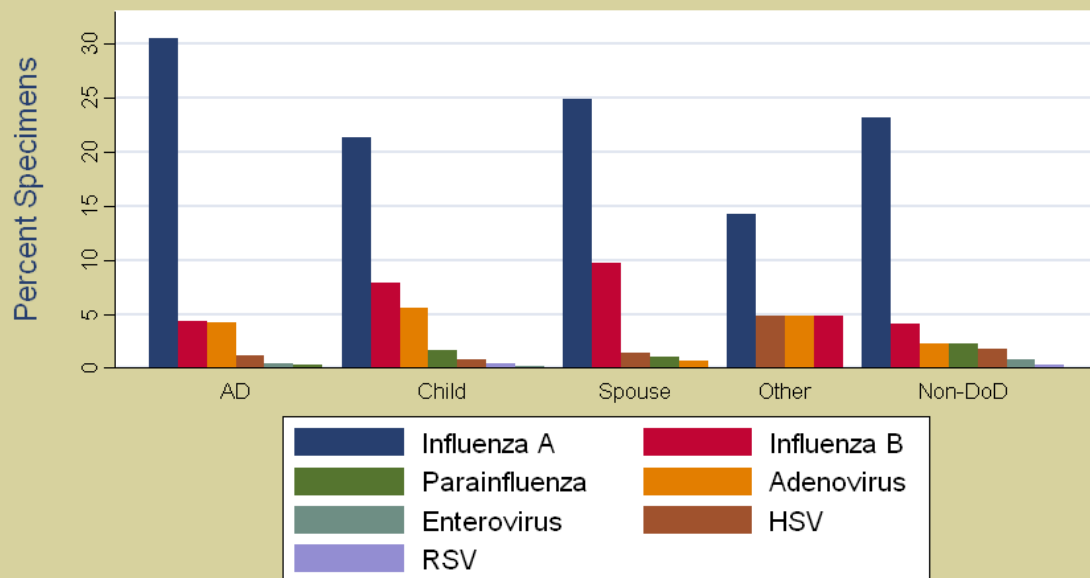
\*Subtyping of samples declined in weeks 5-7 due to the heavy workload of the AFIOH laboratory during the flu season's peak. Influenza subtyping is generally performed as the schedule allows.

## Percent of Respiratory Virus Submissions by Age Group Influenza Season 2004-2005



As of 19 Apr 2005

## Percent of Respiratory Virus Submissions by Family Military Prefix Influenza Season 2004-2005

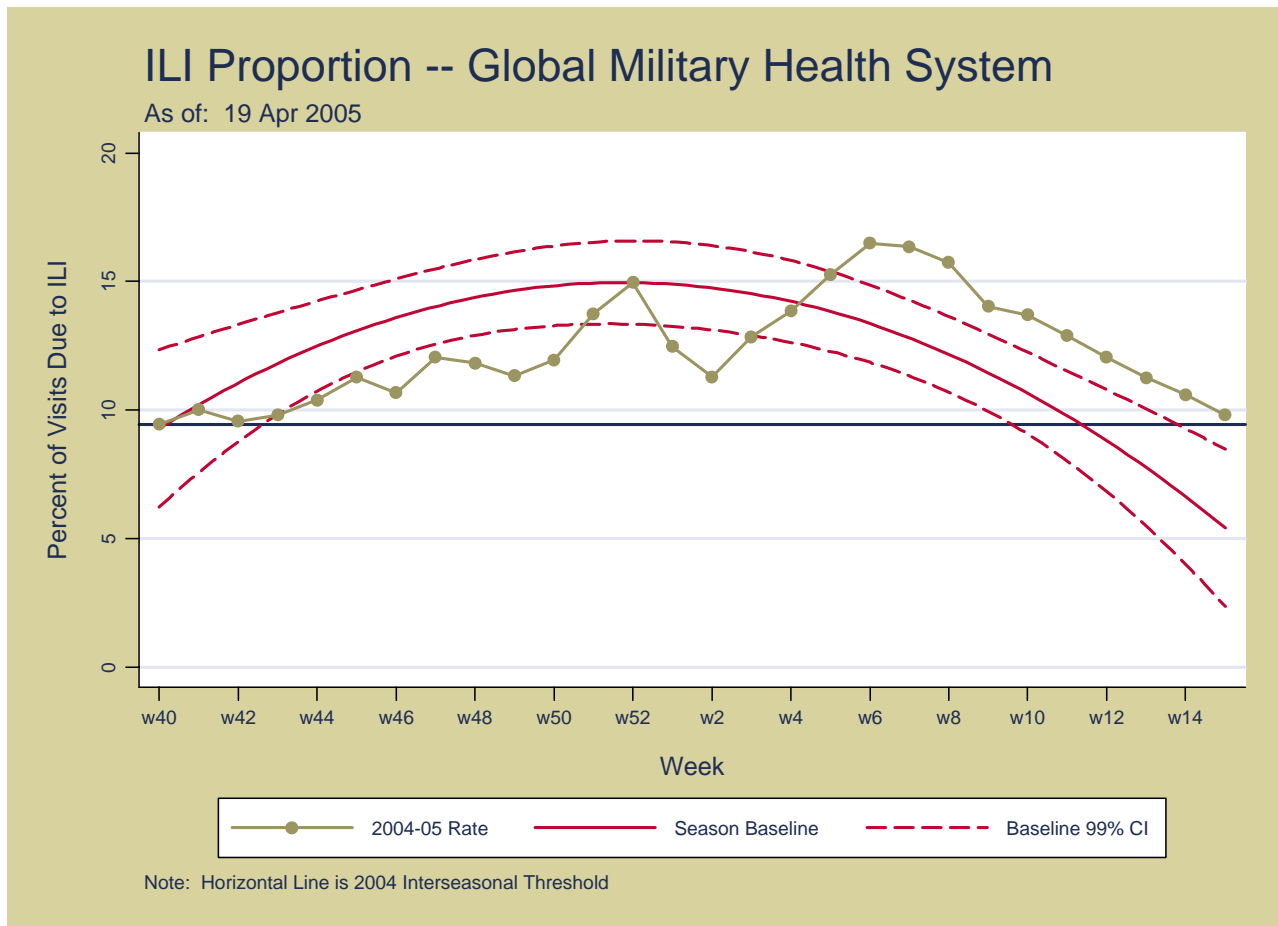


As of 19 Apr 2005



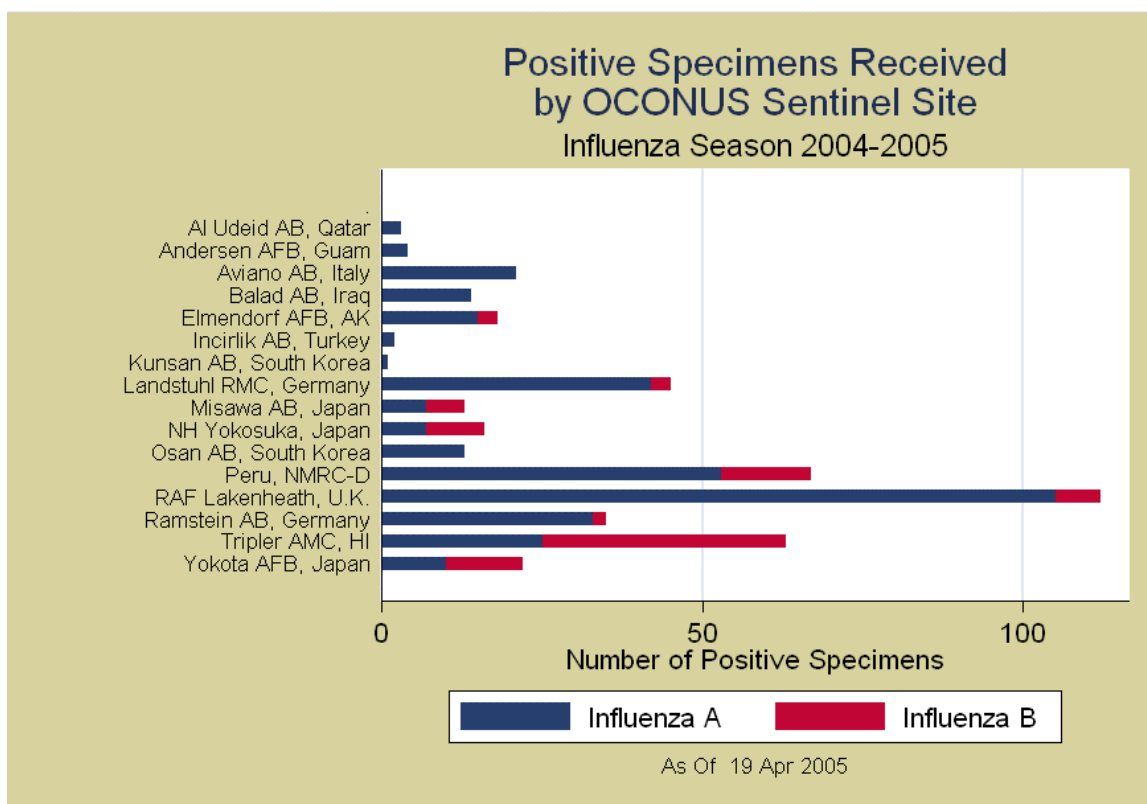
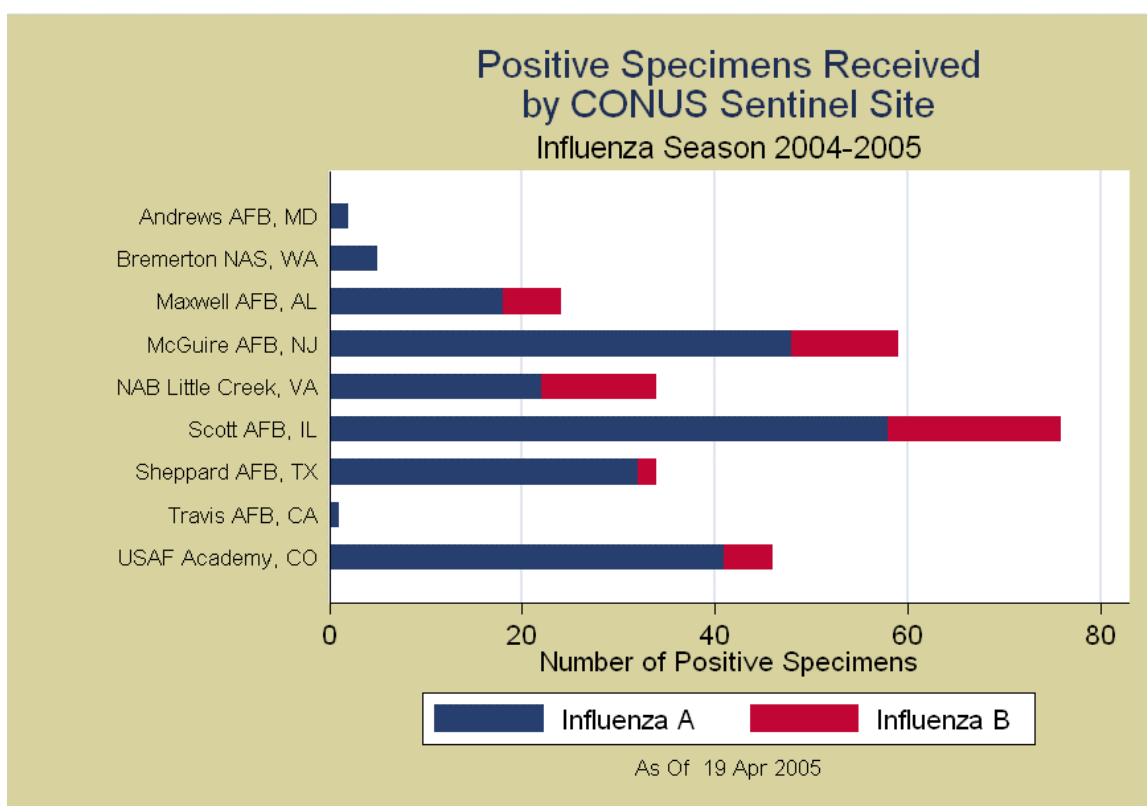
## INFLUENZA-LIKE ILLNESS:

This graph plots the percentage of weekly outpatient visits at military installations that had an ICD-9 code correlating with Influenza-Like Illness as defined by ESSENCE. Visit and coding data were taken from ESSENCE. A seasonal baseline and 99% confidence intervals are included for comparison. The baseline was calculated from ESSENCE data for the previous 2 years. Note that the ESSENCE definition for Influenza-Like Illness differs from the CDC definition. See our website for a detailed explanation.



Graphs for individual bases and regions can be found on the AFIOH Influenza Surveillance website:

<https://gumbo.brooks.af.mil/pestilence/Influenza/ILChartsform.cfm>



Numbers and graphs for individual bases can be found on the AFIOH Influenza Surveillance website:  
<https://gumbo.brooks.af.mil/pestilence/Influenza/>